9. Introduction

Land use is at the heart of planning for the future of the city. The extent, timing, and location of new development, or reuse of existing developed land, depend in large part on the factors covered in the preceding chapters. Population growth, economic development, community facilities, housing, the transportation system, and natural and historic resources all impact land use.

The purpose of this chapter is to profile existing land use patterns and trends and forecast future land use in Augusta. In assessing existing land use, the chapter reviews the factors contributing to land use patterns, the problems with development patterns, and the constraints placed on development. The future land use plan reflects the community's desire to guide and direct future growth, and includes policies that support and reflect the economic, housing, community facilities, and natural and historic resource goals and policies of the comprehensive plan. A future land use map is included that reflects these overriding goals, policies and strategies.

9.1 Inventory of Existing Land Use

A mix of land uses that reflect an older city combined with newer suburbs and semi-rural areas characterizes Augusta. Land use within the "old" city limits includes neighborhoods of varying ages, a central business district, concentrations of public / institutional uses, commercial uses in shopping centers and on individual sites, and industrial uses on scattered sites. These uses are connected by a series of streets and highways, most of which are laid out on a grid pattern. In many cases, residential, commercial and industrial uses are in close proximity to one another, reflecting development that occurred prior to enactment of the local zoning ordinance.

In contrast, that part of the city formerly in unincorporated Richmond County is characterized by a land use pattern more like a community that developed after World War II. Major urban land uses (residential, commercial, industrial and institutional) are separated from one another. Detached, single-family residences in subdivisions, apartment complexes, and manufactured homes are the predominant residential uses. Strip commercial development is prevalent along all of the major arterial highways and consists of shopping centers, office complexes, and businesses on individual sites. Major manufacturing plants are situated in industrial parks or on individual sites in close proximity to highways and railroad lines. At the fringe of the urbanized part of the city, development becomes sparse and gives way to more open space, some farms, residences on larger lots, and woodlands.

An inventory of existing land use was completed to establish the type, spatial distribution, and intensity of development within Augusta. Individual parcels or groups of parcels were classified by primary use and the classifications were then transferred to a map depicting existing land use. The inventory is based on a combination of information from several sources, including the original comprehensive plan completed in 1992, the 1995 land use update, neighborhood plans completed in 1995-1996, and a digitized land

use inventory completed by the CSRA Regional Development Center in 1999-2001. Planning Commission staff used aerial photographs, site plans, subdivision plats and other sources to document the most recent land use changes.

Land uses are classified under the following twelve categories on both the Existing and Future Land Use maps.

- Rural Residential This category includes residential uses at a density of less than one unit per acre. The majority of this acreage consists of single-family detached homes and manufactured homes on relatively large lots, most of which are located in the extreme southern part of the city.
- Low-Density Urban Residential This category includes residential uses at a density of one-to-six units per acre. The majority of this acreage consists of single-family, detached houses clustered in subdivisions located between major arterial highways and collector streets. Several older neighborhoods contain high concentrations of historic single-family and duplex residential structures. Manufactured homes comprise about 10% of the housing market and are located on individual lots and in manufactured home parks.
- **High-Density Urban Residential** The bulk of the high-density residential land use is in apartment complexes located in close proximity to major roads, shopping centers and entertainment facilities. It also includes Augusta Housing Authority complexes scattered around the city.
- **Professional Office** Professional offices are located in a variety of settings, including high-rise office buildings, office parks, stand-alone structures, and converted residences. In Augusta they tend to be concentrated near institutional uses, such as hospitals and government facilities, and in suburban locations visible and accessible to the general public. The few high-rise office buildings in Augusta are located downtown and in the vicinity of the I-520 / Wheeler Road interchange.
- Commercial Commercial uses are concentrated in the central business district, in strip centers and individual lots on arterial streets, in shopping centers, and on scattered sites in older neighborhoods. The largest centers are located at interstate highway interchanges or in close proximity to them. In terms of square footage, the largest shopping centers in Augusta are Augusta Mall and the Augusta Exchange Shopping Center.
- Industrial This category includes manufacturing, warehousing, and surface mining land uses. It also includes the city landfill. Major manufacturing plants are situated in industrial parks, or on individual sites, in the east and southeast portions of the city. Some are also located on scattered sites in the downtown area and in the older city neighborhoods. Light industrial uses and warehousing operations are located along some of the collector roads near Interstate 20 and the Bobby Jones Expressway.

Surface mining operations (e.g. rock, clay, kaolin) are located in the north and east parts of the city and near Hephzibah.

• **Public** / **Institutional** – This category includes certain government offices and facilities, and institutional land uses. Government uses include the municipal building and other government structures, police and fire stations, libraries, prisons, post offices, schools, military installations and similar uses. Examples of institutional land uses include hospitals, churches, cemeteries and colleges.

A number of government offices and facilities are located in downtown Augusta, including the city's municipal building, the state Department of Labor, the main U.S. Post Office, the main branch of the regional library, and federal, state and local courts. The mid-town area includes a mix of public and institutional uses, including University Hospital, the Medical College of Georgia (MCG), MCG Hospital and Clinics, MCG Children's Medical Center, the Veterans Administration Hospital, Paine College, and Walton Rehabilitation Hospital. Augusta State University, the Uptown VA Hospital, St. Joseph's Hospital and Doctors Hospital are other major institutional uses. Elementary and secondary schools, churches, city fire stations, branch libraries and post offices are scattered throughout the city. Major state and federal institutions include Gracewood State School and Hospital, Georgia Regional Hospital, the Youth Development Center, and the Fort Gordon Military Reservation. Fort Gordon, which covers about 44,000 acres, is by far the largest facility in this land use category.

- Transportation / Communications / Utilities The vast majority of this acreage is in street and highway rights-of-way, but there are also two airports, parts of two railroad mainlines and two switchyards, utility substations, radio towers and cellular towers. The city's Geographic Information System indicates there is a total of 1,391 miles of roads in Augusta: Interstate highways (43 mi.), state roads (85 mi.), major county roads (196 mi.), and other roads (1,067 mi.).
- Park / Recreation / Conservation This category includes land dedicated to active or passive recreational uses. Examples include the city's park and recreation facilities scattered throughout the community, several public and private golf courses, the Augusta Canal National Heritage Area, the Phinizy Swamp Wildlife Management Area, and land purchased or donated under the Community Greenspace Program. The largest recreation facilities include Diamond Lakes Regional Park, Pendleton King Park, Lake Olmstead and Julian Smith Casino. Golf Courses include the Augusta Golf Club, Forest Hills Golf Course, and Augusta Country Club, the Augusta National, Goshen Plantation, Green Meadows and Pointe South.
- Agriculture This category includes land dedicated to agriculture, farming (cropland, livestock production, specialty farms) or other similar rural uses such as pasture land not in commercial use. Such uses are scattered across the southern part of the city.

- **Forestry** This category includes land dedicated to commercial timber or pulpwood harvesting or similar uses such as woodlands not in commercial use. Such uses are scattered across the southern part of the city and on Fort Gordon.
- **Undeveloped** This category includes land not developed or not being used for a specific purpose. Examples include vacant lots scattered throughout many neighborhoods, vacant structures that are dilapidated, and floodplains of the Savannah River and local creeks.

Table L-1 Existing Land Use, 2003 Augusta-Richmond County

	Augusta	Richmond County
Residential	52,052	54,328
Professional Office	635	643
Commercial	5,081	5,129
Industrial	9,203	9,402
Public/Institutional	52,753*	52,890*
Transportation/Communications/Utilities	11,520	11,893
Park/Recreation/Conservation	5,873	5,903
Agriculture	10,528	14,775
Forestry	18,708	18,800
Undeveloped/Unused	29,794	36,445
TOTAL	196,147	210,208

^{*}Includes 44,286 acres at Fort Gordon

SOURCES: Comprehensive Plan, Neighborhood Plans, Georgia County Guide, SCS,

FEMA, Site Plans, Subdivision Plats, Tax Records, Aerial Photographs and

Field Surveys

9.2 Assessment of Existing Land Use

Augusta's development has been influenced by many of the same factors that have affected cities throughout the country, including major historic events, the ups and downs of the nation's economy, advancements in transportation and communication systems, improvements in building practices, and national trends in the growth of urban areas. Land use patterns also have been influenced by the area's geography and climate, the

location of natural features, natural and man-made disasters, the timing and location of major federal and state facilities, the extension public utilities, and local development regulations.

9.2.1 Factors Affecting Land Use

Existing land use in Augusta reflects the development history of the area. The city was founded on a site in the downtown area, and for many years development (residential, institutional, commercial and industrial) was concentrated in this general vicinity. As years passed, changes and improvements in such areas as transportation, manufacturing processes, building practices and utilities caused new development to take place to the south and west of the downtown. At the same time, smaller, agriculture-based settlements were established elsewhere in Richmond County. Some of these small communities either ceased to exist after a time, or were eventually absorbed by Fort Gordon, but the remnants of some are still evident. Natural and man-made disasters also influenced development patterns. Periodic outbreaks of disease and flooding along the Savannah River made areas outside of low-lying downtown Augusta more desirable. The March 1916 fire destroyed many downtown buildings and displaced residents of the Olde Town neighborhood.

Thousands of temporary jobs were created when major regional public facilities such as Thurmond Dam and Lake (1948-54), the Savannah River Site (1951-53) and Fort Gordon (1942, 1956) were first constructed. SRS and Fort Gordon have provided thousands of permanent jobs for three generations of area residents. Thurmond Lake, located in neighboring Columbia County, is the region's top recreation attraction, a habitat for fish and fowl, and a source of hydroelectric power and flood control. Not surprisingly, Thurmond Lake has attracted suburban residential and commercial development in the decades since it was constructed. The expansion of public medical (MCG, VA) and educational (ASU, Paine, Augusta Technical College) facilities also created new jobs and increased the demand for housing and retail services.

During the 1950s and 1960s, industrial recruitment and construction of suburban industrial parks resulted in the expansion of paper, chemical and other manufacturing facilities. The establishment of the Augusta Corporate Park, a 1,700-acre industrial park located about 15 miles south of downtown, is one indicator that the suburbanization trend continues to this day. New residential subdivisions were developed in south and west Augusta in response to demand from people moving into the area and local residents desiring newer housing. Suburban shopping centers, malls and office complexes were built to serve the new residential areas and provide more jobs. These trends in suburban residential and commercial development continue to the present day.

Public utilities and roads have been improved and extended to meet the demand in suburban and semi-rural parts of the city. The public water, sewer and solid waste systems now cover much of the city, and other utility (electricity, natural gas) and communications (phone, internet, cable TV) providers serve much of the community. Over the last 50 years, the construction of major roads, such as Gordon Highway,

Interstate 20, Bobby Jones Expressway, J. C. Calhoun Expressway, Jimmie Dyess Parkway and Riverwatch Parkway, has facilitated the movement of people and goods throughout the greater Augusta area. They also fostered additional residential and commercial development. The paving, widening and extension of other arterial highways, such as Deans Bridge Road, Peach Orchard Road, Tobacco Road, Windsor Spring Road and Washington Road, also contributed to development.

Local zoning, subdivision and development regulations also have affected land use patterns. The fundamental purpose of local zoning regulations, which have been in place in Augusta for several decades, is to segregate land uses from one another in order to protect public health, safety and welfare. The local zoning ordinance separates land uses into zones (e.g. agricultural, residential, commercial, industrial) and establishes basic standards related to lot size, lot coverage, height of structures, and setback from property lines and other use zones. The ordinance also includes parking requirements for the different land uses.

The city's subdivision regulations set forth the standards for converting raw land into building lots. The regulations include the general design standards for streets, markers, utility easements, and lots. They also spell out the requirements for preliminary and final plats and the process for approval of both. A number of other related city ordinances include more detailed requirements for drainage structures, water and sewer lines, street and road design, flood damage protection, grading and soil erosion control, and use of public rights-of-way.

9.2.2 Current Land Use Trends

In recent decades the city of Augusta has experienced the "urban sprawl" development patterns evident in communities throughout the country. There is an ongoing national debate about the cause and effect of sprawl, and whether or not this decentralized pattern of metropolitan development is good or bad. This is not an attempt to settle the debate about sprawl, but to point out that development patterns in Augusta have the characteristics of sprawl.

Professor Randall G. Holcombe of Florida State University has written that three kinds of development are typical of "urban sprawl." They include leapfrog development, strip or ribbon development, and low-density, single-dimensional development. Examples of each type of development are present in Augusta.

• Leapfrog Development - Leapfrog development occurs when a new urban use, such as a residential subdivision, is developed in a rural or semi-rural location removed from existing urbanized areas. The new subdivision is attractive to homebuyers because of its remote location, but is close enough to still take advantage of urban services and amenities. When new subdivisions are developed in this manner they increase the demand for public facilities and services (schools, police and fire protection), often conflict with their rural neighbors (e.g. farms), and increase development pressures on surrounding undeveloped land. Residential subdivisions

and homes on individual lots (stick-built and manufactured) are the primary examples of leapfrog development in Augusta.

The flagpole lot subdivision is a notable part of leapfrog development in Augusta. A flagpole lot subdivision is created when a lot with a limited amount of frontage on a public road is subdivided into multiple lots. Typically, each flagpole lot has a 25-foot wide access drive ("the pole") extending back from the road some distance to the wider "flag" part of the lot. The home and any accessory structures are sited on the flag part of the lot. The narrow width of the access drive makes it possible to "stack" multiple flagpole lots next to one another.

The flagpole lot development pattern is attractive because it is a relatively cheap and inexpensive way to develop home sites, especially when a large lot is not conducive to development of conventional subdivision lots. Unfortunately, many flagpole lots in Augusta have driveways that are poorly constructed and maintained, resulting in erosion problems and making it difficult for public safety vehicles to access them. Local flagpole lot regulations have been tightened up in recent years to address these impacts and make it prohibitive to develop additional flagpole lots. However, hundreds of flagpole lot subdivisions remain in the city, with the largest concentrations located in the rural and semi-rural parts of the community.

• Strip Development – Strip or ribbon development is marked by extensive commercial development along both sides of major arterial roads. In Augusta a combination of individual businesses and large shopping centers occur in a linear pattern on virtually all of the major arterials and some of the adjoining collector streets. The largest concentration of such development occurs near interstate highway interchanges and where major arterial roads intersect one another. Typical characteristics of strip commercial development include multiple curb cuts, large expanses of asphalt parking lots and many commercial signs.

Such factors as the desire to separate land uses, the widening and construction of roads, and trends in the commercial real estate market have contributed to strip commercial development. This type of development pattern, while widely accepted, is often cited as unsightly, an inefficient use of land, and a contributor to traffic congestion.

• Single-Use Development - Like many other communities, Augusta has large expanses of low-density, single use development. Low-density, single-family residential subdivisions are the most obvious example of this type of development. Typically, detached single-family residences are located on lots of a quarter-acre or more. The houses front one or more local streets connected to a nearby arterial or collector road. In many cases only one of the subdivision streets connects directly to an arterial or collector road. With a few exceptions, there are no other complimentary improvements or land uses, such as sidewalks, neighborhood parks or open space.

There is no denying that low-density, single-family residential subdivisions are

widely accepted in the marketplace, and a living environment that many families desire. Local zoning regulations, the extension of public utilities, and the availability of cheaper land on the fringe of the city are some of the factors that have contributed to the proliferation of single-use development in recent decades. Augusta's zoning ordinance separates major land uses into different use zones. With some exceptions, the administration of the ordinance has had the effect of keeping residential, commercial, industrial and institutional uses completely separate from one another. The extension of public water and sewer service to cheaper land on the fringe of the city has had the effect of encouraging additional low-density, single-use development.

Single-use development is often criticized as being an inefficient use of land, for increasing dependence on the automobile, and contributing to traffic congestion. Most residential subdivisions tend to be developed at the low densities mandated by the zoning ordinance, when even slightly higher densities or a cluster development pattern could save valuable open space. Subdivisions are often developed in isolation from one another, putting more traffic on collector streets and making it more difficult for pedestrians and bicyclists. Separation from otherwise complimentary uses, such as parks, open space and even some neighborhood-type businesses, makes residents almost totally dependent on the automobile to get from home to other locations. Development at low densities also makes it difficult to provide public transit service in a cost-efficient manner.

9.2.3 Effect of Land Use Patterns

Whether it is called "sprawl" or simply development patterns resulting from the working of a free-market economy, Augusta's land use pattern has many impacts on the community. The impacts vary by type, location and intensity. For example, the impact of growth on downtown and older neighborhoods is different from those in the suburbs and semi-rural areas.

Some impacts, such as increased dependence on the automobile and traffic congestion, have already been mentioned. For purposes of this section, impacts are grouped into four categories: blight and lack of investment, demand on public facilities and services, impacts on the natural environment, and impacts on the quality of life. This grouping provides a way to identify the major impacts of growth on Augusta and Richmond County.

• Blight and Lack of Investment - Shifts in population, housing and commercial development have resulted in blight and lack of investment in downtown Augusta and some older neighborhoods. Population shifts had been underway for several decades, but the opening of two suburban shopping malls in 1978 had an immediate and devastating effect on downtown Augusta. Major retailers relocated to the malls, followed by many of the small retailers that depended on the business generated by the large stores. Some businesses remained to serve the daytime working population and residents of neighborhoods near downtown. However, vacant storefronts, empty parking lots and general neglect characterized downtown.

Several inner city neighborhoods experienced problems similar to downtown. Declining population resulted in deterioration and abandonment of housing in some neighborhoods. Dilapidated housing was torn down, leaving vacant lots to sit idle and collect trash and debris. As the population declined, neighborhood businesses closed up, giving the impression that the market for private investment was weak and that the remaining residents could not support business. Industrial facilities were abandoned as manufacturing operations ceased or relocated. Investment in new public facilities was limited and general property maintenance was sporadic. The general impression was that certain neighborhoods were not safe and healthy places to live and work.

Interestingly, some of the older suburban shopping centers and "first ring" suburbs in Augusta are now experiencing some of the same problems. In recent years both anchor tenants and small retailers have left some of the strip shopping centers located on major highways. The result has been the blight caused by abandoned storefronts (e.g. boarded-up display windows, empty parking lots) and a decrease in services available to adjoining suburban neighborhoods. Some of these same suburban neighborhoods are experiencing a decline in resident population. These neighborhoods are experiencing the effects of an aging population and are competing for residents with newer subdivisions.

• **Demand on Public Facilities and Services** - While the downtown and older neighborhoods are struggling, other parts of the city are transitioning from a rural or semi-rural environment to one characterized by a predominance of urban uses. New subdivisions, homes on individual lots, commercial establishments, professional offices, and institutional uses are being established in a variety of locations, primarily on the south and west sides of the city. Some development is taking place on an infill basis in areas that have already experienced substantial urban development. Other uses are locating on sites in rural or semi-rural areas.

Development in these transitional areas increases the demand on public facilities and services. Locally this demand is particularly evident in the areas of education, fire protection, roads and public utilities. New public schools have been built in these transitional areas in response to shifts in the school-age population. At the same time, some inner-city schools have been consolidated with one another. The same trend is evident in fire protection facilities. The Fire Department is in the midst of building new fire stations to serve transitional areas. Other new stations are being built in older neighborhoods to consolidate the services of two or more existing stations.

The suburban growth has also increased vehicular traffic on area roads. Increased traffic volumes trigger the need to pave dirt roads, improve major intersections, install new traffic signals and controllers, and widen or extend collector and arterial roads. Demand has also grown for expansion of alternative modes of transportation, including public transit and paratransit service and bicycle and pedestrian facilities. Over the last 15 years the SPLOST program has helped finance many road paving

and improvement projects throughout the city. Many unmet needs remain and the demand on existing facilities continues to grow.

The impact of growth on the city's water and sewer systems has been particularly noticeable. At the time of consolidation in 1996, the new government faced the daunting task of combining city and county water and sewer systems and correcting deficiencies in some of the facilities, all while accommodating new users. At the same time, the area was entering a period of several years in which rainfall levels were well below normal. The combination of drought and increased demand taxed the systems and lead to service interruptions, environmental problems, and complaints from the public.

With the publication of *The Master Plan 2000 for Water and Wastewater Systems*, the city embarked on an aggressive program to consolidate and update water and sewer facilities and meet expected demands in the transitional areas. Bond-financed projects are replacing aging water and sewer facilities, making critical connections between the "old" city and county systems, and extending service to transitional areas. New surface water collection, treatment and distribution facilities are being constructed under the program. The goal is to make surface water the primary source of the city's water supply and meet expected future demands on the water and sewer systems.

• Impact on the Natural Environment – The impact of the local land use pattern on natural resources is very typical of most urban development. Over the years, development has replaced natural ground cover with impervious surfaces. New roads, buildings, and parking lots all contribute to the increase in impervious surfaces. While drainage facilities are built in conjunction with these new uses, there is an increase in stormwater runoff to local creeks. Often, the stormwater introduces new pollutants to these water bodies.

Development also alters local floodplains and wetlands, which has environmental and economic consequences. Alteration of floodplains and wetlands make it more difficult for creeks to handle large volumes of water during periods of heavy rainfall. The resulting flooding further alters the floodplain and has an economic cost to both the community and property owners adjacent to the creeks. Soil contamination has occurred on scattered sites, most notably on some industrial sites whose operations pre-date modern environmental regulations. Clean up of these contaminated sites has been costly and time-consuming, and has had social and economic impacts on adjacent property.

The land use pattern also impacts air quality. As pointed out in the Natural Resources chapter, Augusta has a problem with ground level ozone. Ozone is formed when pollutants emitted by cars, manufacturing plants and other sources react chemically in the presence of sunlight. Increased urban development has introduced more sources of air pollution to the area, which has implications for the health of residents, economic development, and investments in transportation projects. Finally, the pattern of land development in Augusta disrupts or eliminates plant and animal

habitats and reduces the amount of open space. Some animals can adapt to these changes, but others cannot.

• Impact on the Quality of Life – Quality of life is a term that is hard to define because it means different things to different people. In an urban setting, "good" quality of life usually means that an area has advantages in such areas as climate, employment, housing price and choice, schools, transportation facilities, and cultural and recreational amenities.

Planning literature is full of conflicting viewpoints on the impact of decentralized growth patterns on the quality of life in urban areas. Advocates of more compact development argue that "sprawl" takes up valuable open space and agricultural land, increases congestion and the time spent in highway traffic, creates remote and isolated neighborhoods on the fringes of cities, and contributes to the decline of downtown and older neighborhoods. Others point out that most Americans prefer a low-density living environment, that suburbanization actually reduces traffic congestion, that the efficiencies of compact development have not been proven, and that cities have to compete with suburban communities to survive.

How has decentralized growth affected the quality of life in Augusta? Has the effect been mostly positive or negative? It is difficult to say if local development patterns are adversely affecting the quality of life. No independent surveys have been conducted on the topic. Comments made during the comprehensive plan public meetings show that those who attended are concerned about a variety of issues, many of which are related to quality of life. Among the concerns expressed during the meetings were the following:

- Preserve remaining open space, agricultural land, and timberland.
- ♦ City should provide public facilities and services (water, sewer, drainage structures, streetlights, and solid waste collection) to underserved areas.
- ♦ Concern expressed about property values in areas containing a mix of conventional lots and flagpole lots, and a mix of stick-built and manufactured housing.
- Better enforcement of building codes and development regulations so that poorly developed projects do not impact adjoining properties and result in costly repairs by the city.
- ♦ Rezone more agricultural zones to residential zones to encourage more conventional subdivision development.
- ◆ Concern expressed about proliferation of personal care homes in neighborhoods.
- Make sidewalks mandatory in new subdivisions and neighborhoods.
- Promote business development throughout the city (i.e. in inner city, older commercial centers and newer industrial parks).
- ♦ Improve the appearance of the city by beautifying gateways, removing dilapidate structures and cleaning up vacant lots.

9.3 Opportunities for Encouraging Infill Development

Infill development includes projects that use vacant or underutilized land in previously developed areas for buildings, parking and other uses. Cities throughout the country are using infill development to create bustling neighborhoods, downtowns and cultural districts. Infill development is transforming cities and suburbs by creating walkable retail districts and neighborhoods, introducing successful mixed-use projects, and emphasizing human-scale development that preserves land and fosters balanced communities.

Augustans realize that there are many community assets that can become catalysts for successful infill development. These assets include a strong and diverse employment base; natural features like the Savannah River and Phinizy Swamp; underused historic buildings; a good transportation network, including transit; and a mix of neighborhoods and housing types. Over the last 20-30 years a number of plans have been developed that emphasize infill development. Many specific projects have resulted from these plans, and there continue to be a wide range of infill development opportunities.

9.3.1 Downtown Redevelopment

Downtown redevelopment has been ongoing for over twenty years. A Downtown Development Plan, first published in 1982 and updated in 1995 and 2000, has directly or indirectly resulted in a number of large public and private infill projects. These projects serve as major attractions for both residents and tourists, and create demand for other businesses. These projects include the Augusta Riverwalk, Augusta Riverfront Center, Riverplace Condominiums and Fort Discovery, Augusta Golf and Gardens, the Augusta Museum of History, and Springfield Village Park. More information on each of these facilities is contained in the Community Facilities and Services chapter.

Countless developers, merchants and property owners have initiated downtown redevelopment projects on their own. Many historic buildings have been renovated and are being adaptively reused as restaurants, nightclubs, artist galleries, antique shops, meeting and reception facilities, and specialty shops. Apartments have been created on the upper floors of many commercial buildings. Many merchants have weathered the "bad times" and continue to provide vital goods and services to residents of downtown and the adjoining neighborhoods. The result is a downtown that is beginning to make a comeback due to the commitment of many people and sizable private and public investment.

Additional large-scale infill projects are on the horizon. Three separate studies recommend the construction of a new regional coliseum/sports arena, a new performing arts center, and a new convention center. Though the recommended site for the coliseum is outside downtown, project consultants envision the development of a new municipal campus downtown on the site of the existing civic center. The municipal campus would be a group of low-rise structures housing city government offices, a new public library, a performing arts center, and related parking and support structures. Greenspace would

surround the structures, and pedestrian-friendly improvements would be made along Eighth Street.

The Performing Arts Center Study, commissioned by the Greater Augusta Council, recommends construction of a multi-purpose facility on a site near the riverfront between Seventh and Eighth Streets. The center would include a 2,000-seat theater with a main floor, a mezzanine and a balcony, and a separate 400-seat theater with fully equipped stage for smaller productions. The center is estimated to cost approximately \$55 million.

A feasibility study completed for the Augusta Convention and Visitors Bureau concluded that the city could support a new exhibit hall and trade center approximately 40,000 square feet in size. The preferred location for the facility is a site that would connect to the Augusta Riverfront Center (Radisson Hotel and Convention Center, Country Suites Hotel). This would put the exhibit hall space and Riverfront Center convention meeting rooms within walking distance of one another. Project consultants estimate that the facility - to include exhibit space, service areas, a new parking deck, and meeting rooms - would cost between \$16.4 and \$20.2 million.

The expectation is that these new large-scale projects will complement other planned projects, such as the new federal office building/bankruptcy court facility, the relocation of downtown railroad tracks, and the renovation of the Municipal Building. These projects will also advance the master plan for downtown and connect to improvement projects in the Laney-Walker neighborhood.

9.3.2 Neighborhood Revitalization

Neighborhood revitalization is another means for encouraging infill development. The condition and health of neighborhoods has been a concern in Augusta for many years. Plans were first developed for neighborhoods within the former city limits in the mid-1970s. These neighborhood plans were updated in the mid-1990s. Demographic profiles of the neighborhoods in the former county were published in 1980. Countless grant applications have documented the needs and opportunities for infill development in individual neighborhoods. In recent years, the City's Consolidated Plan and Strategy - a needs assessment and action plan submitted each year to the U. S. Department of Housing and Urban Development - has focused attention on revitalization projects in the neediest areas of the city.

The city and other stakeholders have successfully implemented infill development projects at the neighborhood level. As a result, the level of sophistication in projects has grown. In July 2003 the Augusta Commission adopted a revitalization strategy and redevelopment plan for a target area encompassing several inner city neighborhoods. The plan is unique in that it seeks to coordinate the ongoing infill development work being undertaken by several non-profit organizations (see additional information in Housing chapter). At the same time, the plan brings together several major institutions the Medical College of Georgia, Paine College, the Augusta Housing Authority, the Richmond County Board of Education, and the MCG Foundation - to collaborate on

some innovative projects. These projects are designed to improve housing conditions, provide more jobs, and increase education levels within the target area. Improvements to some transportation corridors (Laney-Walker Blvd., 15th Street, St. Sebastian Way), and storm sewer systems will augment the other projects.

9.3.3 Commercial Center Redevelopment

The redevelopment of older commercial centers offers another outlet for infill development. The condition and occupancy of older strip commercial centers and shopping malls is of concern to many people in Augusta. Locally, Regency Mall is the most visible vacant commercial property, but there are a number of other smaller centers that are having problems retaining anchor tenants and smaller businesses. The closing of Macy's Department Store at Augusta Mall in 2002 heightened awareness of the issue.

Several strip centers are being successfully reused. The Medical College of Georgia uses the former Sears store on 15th Street as an office building. MCG also converted the adjacent Sears Automotive Center into a vehicle maintenance facility and public safety offices. The Sitel Corporation invested \$5.0 million to establish a call and contact center inside a vacant Wal-Mart at Colony Plaza shopping center on Windsor Spring Road. BellSouth and Care South, a home health care management company, are planning to occupy vacant space in the Walton's Corner shopping center on Walton Way Extension. Peach Orchard Plaza recently received a facelift and commercial realtors are marketing the strip center to a mix of retailers, professional offices and food stores. Religious organizations, fitness clubs, and discount retailers are successfully reusing space in other older commercial centers.

There remain several vacant commercial properties in the city, the most conspicuous one being the 800,000 square foot Regency Mall. In 1999, Greater Augusta Progress, Inc. commissioned a study of Regency Mall. The resulting redevelopment strategy, published in January 2000, recommended that the property be converted to a mixed-use development with office, entertainment, sports-oriented retail and value-oriented outlet retail. The plan emphasized that the design of the development be friendly to automobile, transit and pedestrian traffic, because the various tenants/users would depend on each other for patrons. The plan envisioned a defined core of mixed-use buildings organized around a series of streets and public open spaces. Rocky Creek, which passes through the mall property, would be enhanced as part of the plan. In the long term some housing and local-serving retail might be feasible once other uses have been established.

A separate Corridor and Gateway Enhancement Demonstration Project, completed in June 2000, documented the problems and opportunities along parts of Peach Orchard Road and Gordon Highway, two of Augusta's oldest commercial corridors. Among the challenges identified were various types of physical blight, lack of adequate street lights, lack of maintenance of public spaces, high number of curb cuts, and presence of vacant storefronts. The Corridor and Gateway Action Plan included goals to clean up and maintain the corridors, attract and retain businesses, and enhance the appearance of parking lots, building facades and the public right-of-way. The plan includes general

design guidelines for such things as signage, pedestrian crossings, buffers and building enhancements, and an economic development plan for the Peach Orchard Road corridor. A key to plan implementation is establishing a corridor enhancement committee to direct business development, marketing and related activities. The report also outlines a 10-step process for developing action plans for other commercial corridors in the city.

9.4 Smart Growth and Growth Management Initiatives

The activities and initiatives outlined in the preceding section – downtown redevelopment, neighborhood revitalization, and commercial center redevelopment – indicate that city of Augusta residents are embracing some of the key principles of the so-called "smart growth" movement. This is a nationwide movement in which communities are adopting policies and programs that result in development that serves the economy, the community and the environment. The International City Management Association recently published a report, "Getting to Smart Growth: 100 Policies for Implementation", that identifies ten smart growth principles. These principles include:

- 1. Mix land uses
- 2. Take advantage of compact building design
- 3. Create a range of housing opportunities and choices
- 4. Create walkable neighborhoods
- 5. Foster distinctive, attractive communities with a strong sense of place
- 6. Preserve open space, farmland, natural beauty, and critical environmental areas
- 7. Strengthen and direct development towards existing communities
- 8. Provide a variety of transportation choices
- 9. Make development decisions predictable, fair and cost effective
- 10. Encourage community and stakeholder collaboration in development decisions

Even a brief review of these principles indicates that they can guide the way in which the city addresses critical needs outlined in this comprehensive plan. These principles are reflected in the land use policies in this chapter and the goals, needs and strategies listed in the following chapter.

Growth management – defined as government programs that control the timing, location and character of land use and development – is another component of the smart growth movement. Several of the policies included in the 1995 Land Use and Public Facilities Update – and carried forward in this plan – reflect growth management principles. The applicable policies are designed to encourage infill residential and commercial development, confine new development to targeted areas, and promote mixed land uses in appropriate locations. Additional analysis is needed to address some of these issues, such as the appropriate locations for mixed-use development, and the community as a whole needs to review the applicability of other growth management tools.

One popular tool for mixing land uses is the town center or activity center. A town center is a location or part of a community where a variety of uses – retail, housing, offices, entertainment, lodging, public buildings – are co-mingled with one another. Typically, the town center uses are grouped in a pedestrian-oriented environment in which multiple uses are within a five-minute walk of one another. Town centers are present in urban and suburban locations and in cities and suburbs. Neighboring Columbia County has a growth management plan built around the town center concept and a separate town center plan for the Evans area. Downtown Augusta has some of the major characteristics of a town center, such as a mix of land uses in close proximity to one another, open space and pedestrian facilities, and buildings of similar height, design and setback.

Communities across the country have developed comprehensive plans and growth management plans based on the town center concept. In many of these plans mixed use centers are grouped into categories, such as urban, town and neighborhood centers, based on such factors as the density of employment and housing, the frequency of transit service, and the amount of open space and bicycle and pedestrian facilities. In some plans the town center concept is employed to meet state-mandated growth management objectives. In other plans town centers are viewed as a way to concentrate activity in strategic locations in the community, protect the environment and enhance the quality of life for residents. Design guidelines are employed to assure compatibility in the design and location of buildings, sidewalks, landscaping, outdoor lighting, open space and parking in town centers.

The city of Augusta and all community stakeholders will continue to refine existing smart growth initiatives and explore the applicability of other items in the "smart growth toolkit" to address critical community needs related to future growth and development. One good place to start is the smart growth toolkit compiled by the Georgia Quality Growth Partnership (GQGP), and accessible on the organization's website (www.georgiaqualitygrowth.org). The Georgia Quality Growth Partnership is a collaboration among diverse public and private organizations formed out of a desire to coordinate their efforts at promoting quality growth approaches throughout the state of Georgia. Among the 37 participating organizations are the Georgia Municipal Association (GMA), the Association County Commissioners of Georgia (ACCG) and the HomeBuilders Association of Georgia.

9.5 Future Land Use

Table L-2 compares existing and future land use by category in Augusta-Richmond County. The projections of future land use are based on a combination of service standards and basic assumptions about development activity and intensity. Future land use will be influenced by such factors as current development patterns and trends, the presence of utilities and improved roads, environmental constraints, the availability of land, proximity to complementary land uses, and the application of land use policies and regulations.

9.5.1 Estimate of Future Residential Acreage

Over the next twenty years new residential development in Augusta will include a mix of housing types in a variety of settings. The majority of new units will be single-family detached units built in conventional suburban subdivisions. Areas in south Augusta and west of Augusta Mall are the most likely locations for both new site-built units and manufactured housing units. Higher-density single-family residences (townhouses, patio homes) and apartments will be sited where land is in short supply and where proximity to employment and commercial centers is important. Infill residential development will continue in older neighborhoods and additional downtown buildings will be converted to residential use.

The estimate of future residential acreage is based on the population and household projections in the Population chapter. The new housing units were allocated across four classes of residential land use based on the existing distribution. The four classes include Rural Residential (<1 unit / acre), Low-Density Urban Residential (2-4 units / acre), Medium Density Urban Residential (5-10 units / acre), and High Density Urban Residential (>10 units / acre). An estimate was generated of the acreage added within each residential class based on the various densities. Each residential classification is expected to retain about the same proportion to total residential acreage over the forecast period. For example, low-density urban residential use is expected to account for 53-55% of the acreage in all residential uses.

9.5.2 Estimate of Future Commercial & Industrial Acreage

The continued diversification of the area's economy and employment will generate additional commercial and industrial development over the next two decades. The majority of new commercial development will be attracted to sites located in the suburbs and transitional urban/rural areas. Sites on roads and intersections with high vehicle traffic counts will continue to be especially attractive.

Some of the new/expanded retail and professional office development will be accommodated in existing facilities. As noted in the Economic Development chapter, several existing shopping centers are being adaptively reused. In addition, community leaders are focused on attracting additional retail development to the city in order to fill up the estimated one million square feet of vacant retail space. Additional commercial and office development will be attracted to the revitalized downtown and inner city neighborhoods.

New industrial development will be located in the Augusta Corporate Park and on other sites suitably zoned and with good connections to the surface and air transportation networks. The majority of such sites are located in east and south Augusta. Expansion of existing manufacturing and warehousing operations will account for a significant amount of investment, but probably not consume a great deal of additional land.

Estimates of future commercial and professional office land use were based on the assumption that the number of employees per acre will remain the same as it is now. The same basic assumption was made in calculating future industrial acreage. These assumptions result in an increase of about 1,600 acres used for commercial and professional development, and another 1,900 acres devoted to industrial and warehousing establishments.

9.5.3 Estimate of Future Acreage in Other Land Uses

In the Public/Institutional category it was assumed that Fort Gordon will remain approximately the same size and that other related uses will increase marginally over the next twenty years. The Public/Institutional uses most likely to consume additional acreage include churches, public schools, fire stations and government buildings. Some public uses, such as the Phinizy Road Detention Center, already have additional land on which to expand. The net increase in the Public/Institutional category is 402 acres.

A modest increase of 250 acres is forecast in the Transportation, Communications and Utilities category. Road construction and widening projects, cell tower installation, and utility extensions will lead the way in the category. Airport and railroad acreage is expected to remain unchanged, even though some rail line abandonment is expected.

The expected change in the amount of land used for Parks, Recreation and Conservation is based on a combination of service standards and assumptions about conservation activities. The forecast of acreage devoted to active recreation in the year 2025 is based on the city reaching the minimum standard of 6.25 acres / 1,000 population set by the National Recreation and Parks Association. The city currently has 5.31 acres for every 1,000 population. The forecast of passive recreation and conservation acreage is based on the assumption that an additional 400 acres will be added to the Merry Brickyard Ponds Wetlands Mitigation Bank, and that an average of 75 acres/year will be added to the city's Greenspace Program.

9.6 Policies Guiding Future Land Use Plan

This section of the chapter lists the land use policies that will guide the implementation of Augusta's Comprehensive Plan. Over the years, Augusta has used a number of land use policies, including growth management policies, to guide land use decisions and to designate areas for specific land uses on the Future Land Use map. The policies outlined here build on the existing policies, taking into account the future vision for the city, recent changes in land use, and the public input provided during the development of the plan. They reflect the city's basic approach to future land use, which is to encourage a mix of infill development and new construction in areas where urban services are either available or planned.

The policy recommendations are the product of a comprehensive, general, and long-range planning process. These should be consulted in making any decisions that impact growth and development. Many of the recommendations will need to be "fleshed out" through

more specific planning and engineering studies. Some will require the alteration of existing ordinances or the creation of new ordinances.

Guiding Policy: Encourage the preservation of residential areas by protecting them from the encroachment of conflicting land uses

Augusta has many well-established, low-density neighborhoods. In many instances there are active neighborhood associations committed to protecting the integrity of the neighborhood and the quality of life. It is critical that neighborhoods are protected from other land uses that are not compatible with them, such as higher-density residential development, industrial facilities and commercial uses that generate high traffic volumes. Maintaining the integrity of existing low-density, single-family zones is the primary means for preserving established neighborhoods. Installing natural buffers or allowing transitional land uses (e.g. professional offices, townhouses) are examples of other methods used to minimize the impact of more intense land uses on neighborhoods.

Guiding Policy: Protect neighborhoods from the adverse effects of special exceptions

Special Exceptions are land uses permitted in any zone when the local government finds that such use is essential or desirable to the public and is in keeping with the goals of the land use plan. Examples of land uses permitted by special exception under the local zoning ordinance include churches, nursing homes, personal care homes, day care facilities (children and adults), transitional housing, funeral homes and private recreation facilities.

Special exceptions are carefully scrutinized because their impact on adjoining residential areas can vary depending on the proposed use. For example, the effect of a new church and related use is different from a family day care home. For this reason, special exceptions are considered on a case-by-case basis in accordance with the requirements and standards in the zoning ordinance. Minimum lot sizes, minimum road frontage, restrictions on hours of operation, limits on outdoor lighting and minimum spacing requirements are examples of the restrictions or conditions placed on special exceptions to minimize their impact on adjoining residential areas. For many special exceptions, a concept plan must be submitted at the time of application so that the effect of the use can be evaluated

Guiding Policy: Encourage the redevelopment of older neighborhoods

It is imperative that all of Augusta's neighborhoods be desirable places in which to live and recreate. It is clear from the facts and issues covered in the population, housing, land use, and economic development chapters that some neighborhoods have experienced loss of population, housing deterioration, and economic decline in the last few decades. The resulting blight directly affects the remaining neighborhood residents and reduces the quality of life for all residents of Augusta. It also is clear that the public, private and non-profit sectors are working cooperatively to address many of the problems in older neighborhoods. Their combined efforts have resulted in the construction and

rehabilitation of housing, improvements to public facilities, expansion of business, and creation of jobs. Much remains to be done, and this policy support efforts to redevelop neighborhoods in accordance with more specific revitalization strategies.

Guiding Policy: Encourage infill development

This policy complements the policy to redevelop older residential and commercial areas. It is designed to promote a more compact urban form and discourage the sprawl pattern of development. The policy encourages development in areas where adequate infrastructure (roads, utilities) and public facilities and services (fire and police protection, parks) already exist. This policy will likely result in higher density development on some infill sites. Overlay zoning and design guidelines are two of the tools most often used to assure that infill development is compatible with existing residential and commercial development. The following policies should be applied as necessary to protect established neighborhoods adjacent to infill sites:

- Multiple family and high-density, single-family residential development (six units or more per acre) should be permitted only in commercial areas and transitional commercial/residential areas. Spot zoning for such uses should not be permitted.
- Planned medium density single-family residential development (four to six units per acre), should be integrated into existing residential areas but consideration should be given as to the impact on traffic, schools, and recreation facilities. The subdivision of lots to create density greater than the surrounding areas should not be permitted.

Guiding Policy: Encourage mixed-use development

Mixed-use development (i.e. the town center concept) allows housing, some retail uses, and professional offices to locate in close proximity to one another. While contrary to the separation of land uses mandated by most local zoning ordinances, mixed-use development can be an effective tool to counteract the effects of sprawl. Depending on the location and scale, mixed-use development can be less costly than conventional development and can be employed in both urban and suburban settings. Mixed-use development is practiced on a limited scale in Augusta. The zoning ordinance permits residential development in commercial zones. Some property owners have used this provision to establish apartments on the upper stories of commercial buildings in downtown Augusta.

It is difficult to specify appropriate locations for mixed-use development. Land use categories on the Future Land Use map reflect the predominant future use of the property. Depending on the location, mixed-use development, including housing, may be appropriate in an area designated for professional or commercial development. Once an appropriate location is identified, another option is to establish an overlay zone, including design guidelines, applicable to the mixed-use development.

Guiding Policy: Provide zoning for land suitable for projected new conventional single-family residential development

Most new low-density, single-family residential development is anticipated to be located on sites south and west of the Bobby Jones Expressway (I-520). Other parts of the city are already heavily developed and infill development will be the pattern in them. The current agricultural zoning in many of the areas outside the Bobby Jones allows for a mix of conventional and manufactured home development. It is recommended that land be rezoned from A (agricultural) to either R-1 (one-family residential) or R-MH (residential manufactured home) in areas where the average lot size is less that two (2) acres. If more that 40% of the housing units in the area are manufactured homes, then rezoning to R-MH is appropriate. Otherwise, the area should be rezoned to R-1. This would leave substantial remaining areas where manufactured home development is permitted.

Guiding Policy: Provide zoning for land suitable for new manufactured homes

Manufactured housing currently represents about 10% of the housing market in Augusta, and is expected to remain about the same percentage in the future. Manufactured housing generally represents the most affordable housing available in the area. To accommodate them, this policy recommends the following actions:

- Amend the zoning ordinance to raise the minimum lot size in Agricultural zones to 2 acres,
- Rezone from Agricultural to Residential Manufactured Home those areas where manufactured homes comprise more than 40% of all units and the majority of lots are less than 2 acres in size.

Guiding Policy: Encourage the redevelopment of older commercial centers

An important part of the overall land use strategy is to encourage the redevelopment and reuse of older commercial centers that have been abandoned or vacated. Redevelopment makes use of existing infrastructure (roads, utilities, and buildings) and brings jobs and needed services to adjoining neighborhoods. It is also consistent with other policies in the land use plan designed to discourage additional commercial zoning, especially General Business zoning, except at major intersections.

Some older centers in Augusta have been successfully redeveloped and reoccupied. Others, most notably Regency Mall, remain vacant and a blight on the community and adjacent neighborhoods. It is important to recognize that a single redevelopment strategy will not fit all of the older commercial centers. The existing success stories offer some important clues for how to reoccupy traditional strip centers with a mix of institutional and business establishments. Regency Mall is a unique situation because of its size and the high cost to redevelop. As the Regency Mall Redevelopment Strategy makes clear, successful reuse of the property will take a broader mix of land uses (institutional, commercial, office, housing, and recreation) and a longer period of time.

Guiding Policy: Encourage commercial development on principal arterial highways where commercial and / or industrial development is already established

This policy reflects a goal of the plan to limit most commercial development to major roadways. The fact is that principal arterial roads are the most appropriate locations for commercial development because they are designed to handle the vehicle traffic generated by such uses, thereby keeping such traffic out of residential areas. It also reflects the fact that under current Georgia law, governing bodies are almost compelled to permit commercialization of such areas, and seemingly have limited ability to prevent "strip" development of major roads in favor of nodal development at intersections.

Commercial zoning on the principal arterial roads should be limited to a maximum depth of 400 feet, measured from the right-of-way line, except at major intersections or at malls and regional shopping centers. For purposes of this policy, the applicable roads include those identified as "Urban Principal Arterial" and "Principal Arterial" (Rural Legend) on the Highway Functional Classification Maps for the Augusta Urban Area, prepared in accordance with Federal Highway Administration guidelines, and adopted by the Augusta Commission.

It is important to minimize the impact of new commercial uses on adjoining residential areas. Some of the common measures used to screen or buffer new commercial uses from adjoining residential uses include retaining natural vegetative buffers that are already in place, planting trees and other natural vegetation in accordance with the requirements of the city's tree ordinance, and erecting fences or walls. A combination of these measures may be necessary in some instances.

Guiding Policy: Discourage commercial and professional office development on minor arterials and collector roads where such development has not been established, except at major intersections

This policy is designed to limit commercial and professional office development on arterial roads and collector roads in order to protect established residential areas. The policy is also applicable in undeveloped areas where it is desirable to limit such development to major intersections in order to protect open space, agricultural land, and future residential areas.

In the areas where there is a precedent for commercial and professional office development, commercial and professional zoning should be limited to a radius of approximately 500 feet from the center of intersections, and to a strip not more than 300 feet deep, if appropriate. For purposes of this policy, the applicable roads include those identified as "Minor Arterial", "Collector" (Urban and Rural Legends) on the Highway Functional Classification Maps for the Augusta Urban Area, prepared in accordance with Federal Highway Administration guidelines, and adopted by the Augusta Commission.

There will be instances in which an existing residential structure is proposed for adaptive reuse as a professional office or neighborhood business. This will most often happen in older neighborhoods and at intersections that are transitioning from residential to non-residential use. Where such property is located within the 500-foot radius, the rezoning may be appropriate under the following conditions:

- 1. The zoning or development is restricted to the subject parcel,
- 2. The existing residential structure can be adaptively reused without drastically changing the exterior appearance,
- 3. Required off-street vehicle parking and loading areas are located in a side or rear yard, and
- 4. Required parking is screened from adjoining residential uses.

Guiding Policy: Encourage industrial development in appropriate locations

Most existing industrial facilities in Augusta are located in close proximity to needed resources (water, utilities) and transportation facilities and away from residential areas. There are exceptions and existing neighborhoods in close proximity to industrial uses need to be accommodated through appropriate emergency management assistance programs. To avoid potential land use conflict in the future, industrial development should be confined to specific areas and spot zoning for industrial sites should not be permitted. Heavy industrial development should be confined to the area east of Georgia Highway 56 and the remainder of east Augusta, and to industrial parks and sites already zoned for such uses. Light industrial development should be confined to several general areas that are identified on the future land use map. Spot zoning for industrial development in areas other than those identified should be prohibited.

Guiding Policy: Protect environmentally sensitive areas

Augusta-Richmond County has many environmentally sensitive areas, including floodplains, wetlands, aquifer recharge areas, natural habitats, and open space. The local government, private sector, and residents recognize the value of these resources and use a variety of tools to preserve them, educate the community, and protect them from insensitive development. Among the tools used are local development regulations and ordinances, flood mitigation planning, the Community Greenspace Program, and community outreach and education initiatives. As the city continues to grow, it will be important to use as many tools as possible to protect these resources.

One tool recently incorporated into the city's zoning ordinance is the conservation subdivision design. Conservation subdivisions are residential or mixed-use developments in which a significant portion of the land is set aside as undivided, permanently protected open space (approximately 25 to 40%) and the houses are clustered on smaller sized lots. Depending on the setting, green space in conservation subdivisions is used for passive recreation, habitat for wildlife, and to protect wetlands and floodplains.

Augusta's zoning ordinance allows conservation subdivisions to be developed at varying densities in most single-family residential zones. The ordinance specifies that a minimum of 40% of the conservation subdivision be permanently protected greenspace. A local builder is currently developing the plans for Augusta's first conservation subdivision. Augusta will also continue to implement the Community Greenspace Program using Georgia Greenspace funds and other available funding and incentives that can be used to convert sensitive environmental areas to permanently protected greenspace.

Table L-2 Future Land Use, 2025 Augusta-Richmond County

	2003		20)25
	Acres	Total	Acres	Total
Residential		52,052		59,886
Rural Residential	19,853		21,465	
Urban Residential - Low Density	27,700		33,246	
Urban Residential - Medium Density	3,078		3,541	
Urban Residential - High Density	1,421		1,634	
Professional Office		635		985
Commercial		5,081		6,371
		,		
Industrial	6.071	9,203	0.042	11,174
Manufacturing/Warehousing	6,071		8,042	
Mining	1,945		1,945	
Landfill	1,187		1,187	
Public/Institutional		52,753*		53,155*
Trans./Comm./Utilities		11,520		11,770
Park/Rec./Conservation		5,873		12,296
Recreation - Active	1,033	2,372	1,406	12,2>0
Recreation- Passive & Conservation	3,798		9,698	
Golf Courses	1,042		1,192	
Agriculture		10,528		6,228
Forestry		18,708		15,902
Polestry		10,700		13,702
Undeveloped/Unused	25.01.6	29,794	15.000	18,380
Vacant Land	27,016		15,602	
Water	2,778		2,778	
TOTAL – All Land Uses		196,147		196,147

^{*}Includes 44,286 acres at Fort Gordon

SOURCES: Comprehensive Plan, Neighborhood Plans, Georgia County Guide, SCS, FEMA, Site Plans, Subdivision Plats, Tax Records, Aerial Photographs and Field Surveys